



# ecology and environment, inc.

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US EPA RECORDS CENTER REGION 5



491568

IL0090-08  
R05 8303-01

## MEMORANDUM

DATE: June 7, 1984  
TO: Files  
FROM: Mark Lunsford  
SUBJECT: Summary of Water Resources Research for East St. Louis Area  
Indiana/TDD# R05-8303-01 #0040 SCA Milan Landfill  
#0144 Monsanto/Sauget  
TDD# R5-8303-01A #0157 Moss American  
TDD# R5-8303-01B #0187 Union Electric/Venice

On Thursday, May 3, 1984, Randy Livingston and the author visited the Illinois American Water Company's East St. Louis and Granite City District Offices to gather information on the extent of the area receiving the company's water. Distribution system maps and a general plan of their distribution system were obtained from Marty Athy of the East St. Louis District Office, and Norm Sanders and Bob Jackson of the Granite City District Office.

On Friday morning, May 4, 1984, the author met with Mike Keefe of the Southwestern Illinois Metropolitan and Regional Planning Commission (SWIMPC) in Collinsville, who is the author of a report entitled "A Summary of Information Related to the Comprehensive Management of Groundwater Resources in Madison, Monroe, and St. Clair Counties, Illinois", November, 1983. Mr. Keefe stated that a copy of the report could be obtained by calling Jim Pendowski, Planning Section, Division of Water Pollution Control, Illinois EPA, Springfield. Plates 11 and 12 of Mr. Keefe's report contain vital information for HRS scoring. Plate 11 titled "Location of Public and Industrial Water Supply Wells" was compiled from information supplied by

Jim Kirk of the Illinois State Water Survey (ISWS). Well logs that were gathered from the ISWS in Champaign for the area of concern should indicate the specific location of each public and industrial water supply well. Plate 12 shows the estimated number of residences served by private water systems in each township and urban area.

Mr. Keefe explained that he found the information used to compile Plate 12 from census books, which listed by township or urban area the number of residences served by private water systems. The census books do not contain information on individual residences, nor did Mr. Keefe have access to census questionnaires filled out by individual households, which may be the only way to pinpoint residences with their own wells. Mr. Keefe said he believed that census questionnaires were kept confidential by a privacy act. If access to information on the location of private wells becomes critically important, FIT should seek permission from the U.S. Bureau of the Census to examine their records more closely.

On May 4, the author went to Cahokia, Illinois to find out the extent of the area served by water supply systems. Bob Jackson, Manager for Commonfield's of Cahokia Public Water District, ~~who~~ explained that Commonfield's supplies 5,500 customers, has its own distribution system and buys water at wholesale from the Illinois American Water Company. Newer areas of Cahokia get their drinking water exclusively from Commonfield's, but some older areas of Alorton and Centreville could have private wells. Mr. Jackson outlined the areas served by the Village of Cahokia and Commonfield's water supply systems. See the attached photocopied sections of the Cahokia and French Village topographic maps to see the service areas. He also stated that throughout the areas served by the Village of Cahokia and Commonfield's of Cahokia water systems, these are approximately 1,500 private wells that are used to water lawns and gardens. These wells are not used for drinking water because the iron content is too high. The author also met with Fred Davis, Superintendent for the Village of Cahokia's water system. He said they have 1,600 customers and buy water from Commonfield's.

On May 16 and 17, Chris Nolan and the author researched water well records for the East St. Louis area at the Illinois State Water Survey (ISWS) in Champaign. Dorothy M. Woller, Hydrology Assistant, located the files for the area. The following is a description of the area covered by our research:

T.1N.,R.9W.	Part of Centreville Township, Section 6
T.1N.,R.10W.	Centreville Township, Sections 2, 3, 10-12
T.2N.,R.9W.	Sections 2-11, 15-20, 29-32
T.2N.,R.10W.	Sections 1, 2, 11-14, 23-27, 33-36
T.3N.,R.9W.	Sections 19-22, 26-35
T.3N.,R.10W.	Sections 13-15, 22-26, 35, 36

Well logs at the ISWS are arranged in three types of files: by township and range, city name, and industry name for larger facilities. Each well log from the "township and range" files in the area described above was examined. Well logs from "city" and "industrial" files for cities and industries within the study area were also examined. For each well record the location (township, range, and section), depth and type of material that the well is finished in was recorded. The names of industries, businesses, schools, and government facilities with well logs were recorded next to the well log entry for each named institution. Entries for well logs that have no name with them are from private residences. Some well logs for industrial wells were photocopied. Chris Nolan compiled a list of all well logs from our research. Attached are photocopied well logs and the well list.

Well logs for industry locations do not specify whether water from a well is used for drinking or industrial purposes. To complete HRS scoring, it may be necessary to contact these industries or some other source to find out what the wells are used for.

In order to determine the population drawing from the aquifer of concern for any of the four sites, it will be necessary to compare the township, range, and section numbers within a three mile radius for each site to the area covered by our research so the well data for the site can be separated from well data that is appropriate only for the other sites.

ML:3X